National Aeronautics and Space Administration

New Frontiers: Pre-proposal Conference

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New Frontiers Program

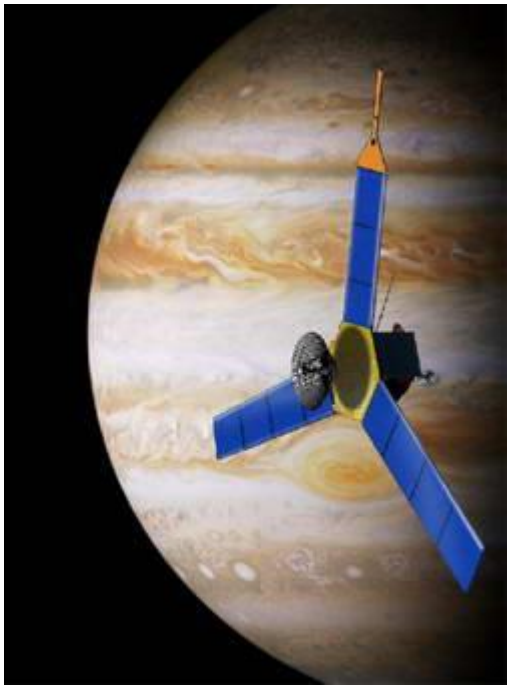
1st NF mission
New Horizons:

Pluto-Kuiper Belt Mission

Launched January 2006
Arrives July 2015

2nd NF mission
JUNO:

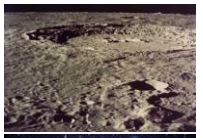
Jupiter Polar Orbiter Mission



August 2011 launch

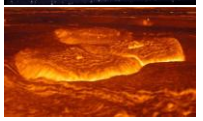
3rd NF mission opportunity

South Pole Aitken Basin Sample Return



Comet Surface Sample Return (CSSR)

Venus In Situ Explorer (VISE)

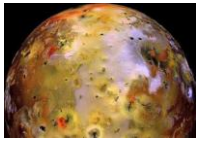


Network Science

Trojan/Centaur

Asteroid Sample Return

Io Observer



Ganymede Observer

NF Features

Schedule	Draft in 11/ 08, AO 4/20/09, NOI 6/12, Proposals due 7/31/09
Phase A	10 months, up to 3 missions, $2.5M each. Longer phase B (30-35months)
PI Experience	No minimum requirement but team experience is an evaluation criteria
Nuclear Devices	RHUs and calibration sources can be proposed but no RPS
Science Focus	Followed NOSSE recommendations 1 & 2, open to 8 science targets
Weight Criteria	Step 1: 40% science, 30% science implementation, 30% TMC
Technology	PSD cost sharing with PI $15M for NEXT & $5M for AMBR, Step 1: evaluation will not affect risk rating, Step 2: evaluation will affect risk rating
PI Mission Cost	$650M not including LV + $5-$15M for optional technology (in FY09$)
LV	$220M (FY09$) for GFE intermediate class EELV (Delta IV Heavy excluded) with any fairing size
Launch window	2015-2018. Late CY2016-2018 optimized launch window according to target
Cost Profile	Step 1: PI to propose length and budget for Phases B-F, Step 2: PI to evaluate effect of target cost profile, Bridge Phase: negotiate actual cost profile
DSN Cost	Included in PI Mission Cost
DSN Use	One 34m antenna except for emergencies and critical events
NEPA Cost	Included in PI Mission Cost for RHUs and calibration sources
Mission Class	Class B
EPO	1% of PI Mission Cost, Step 1: no evaluation and no EPO Lead defined, Step 2: required. *Student collaboration*